the present paper, and illustrates a larger portion of the leaf than those in Dawson's collection, showing the pinnae attached to a rachis.

Dawson's description was very short (p. 52):—"This resembles the last species (S. Hoeninghaust) in general form, but is larger, with the pinnules round or round-ovate, divided into three or five rounded lobes, and united by a broad base to the broadly winged petiole." The "broadly winged petiole" is not shown in the drawing fig. 184 pl. XVI, Dawson, 1871) nor, as far as I can see, is it present in either the type specimen or any other I have examined. In the final tips of some of the pinnae, the small pinnules are slightly confluent at the base, to which Dawson's remark may possibly refer.

An enlargment of some of the pinnules and their venation, so far as it is preserved, indicates the character of the leaflets, and shows their simple rounded form, which is their salient feature.

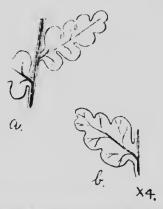


Fig. 1. Sphenopteris marginata, Dawson. Enlargement of pinnules. a, typical pinnule;
b, the most completely preserved venation of a pinnule.

Though it is not possible to affirm positively that this piant is identical with the European S. rotundifolia because of the loss of the finer veins in the Canadian specimens, yet there seems little doubt that they are the same, and M. Zeiller expressed himself as finding the greatest likeness between them.